

LOAN AWARD REQUEST

CEC-271 (Revised 05/11)

CALIFORNIA ENERGY COMMISSION

To: Grants and Loans OfficeDate: 07 / 15 / 2011Project Manager: Shahid ChaudhryPhone Number: (916) 654-4858Office Special ProjectsDivision: Fuels & TransportationMS- 23Project Title: CDCR / Corcoran Facility**Type of Request:** (check one)

<input checked="" type="checkbox"/> New Agreement: (include items A - F from below)	Agreement Number: <u>Assigned by the G&L Office</u>
Program: <u>Energy Conservation Assistance Act (ECAA) Loan Program</u>	
Solicitation Name: <u>Energy Conservation Assistance Act (ECAA)</u>	
Legal Name of Recipient: <u>California Dept. of Corrections & Rehabilitation/Corcoran Facility</u>	
Recipient's Full Mailing Address: <u>9838 Old Placerville Road, Sacramento, CA 95827</u>	
Project Site: <u>900 Quebec Ave., Corcoran, CA 93212</u>	
Recipient's Project Officer: <u>Mark Hardcastle</u> Phone Number: <u>(916) 255-2229 ext.</u>	
Email Address <u>vic.avila@hayward-ca.gov</u>	
Agreement Start Date: <u>08 / 01 / 2011</u> Agreement End Date: <u>6 / 29 / 2013</u>	
Annual Energy Savings: <u>\$ 330,568.00</u> Total Loan Amount: <u>\$ 2,056,229.00</u>	
Number of Repay Periods: <u>(Leave blank if repay is based on energy savings)</u>	

<input type="checkbox"/> Amendment : (Check all that apply)	Agreement Number: _____
<input type="checkbox"/> Term Extension – New End Date: _____ / _____ / _____	
<input type="checkbox"/> Change of Scope (include items A – G from below, as applicable)	
<input type="checkbox"/> Loan Augmentation: \$ _____	

ITEMS TO ATTACH WITH REQUEST:

- | | | |
|---|--|---------------------------------|
| A. Loan information including application and budget details. | D. CEQA Compliance Form. | F. ECM Codes, if applicable. |
| B. Recipient Resolution. | E. Other Documents as applicable. | G. Justification for Amendment. |
| C. Special Conditions, if applicable. | • Copy of Pre-Award Correspondence | H. Subcontractor Information |
| | • Copy of All Other Relevant Documents | |

California Environmental Quality Act (CEQA)		
<input type="checkbox"/> CEC finds, based on recipient's documentation in compliance with CEQA:		
<input checked="" type="checkbox"/> Project exempt: Section 15301 Class 1 (a)	NOE filed: _____ / _____ / _____	
<input type="checkbox"/> Environmental Document prepared: <u>Type</u>	NOD filed: _____ / _____ / _____	
<input type="checkbox"/> Other: <u>Explain</u>		
<input type="checkbox"/> CEC has made CEQA finding described in CEC-280, attached		

Funding Information:					
Source #1: <u>ECA</u>	Amount: <u>\$ 2,056,229.00</u>	Statute: <u>1994</u>	FY: <u>2010</u>	Budget List #: <u>401.007</u>	
Source #2: _____	Amount: <u>\$ 0.00</u>	Statute: _____	FY: _____	Budget List #: _____	
Source #3: _____	Amount: <u>\$ 0.00</u>	Statute: _____	FY: _____	Budget List #: _____	

Business Meeting Approval: (refer to Business Meeting Schedule)		Date due to Secretariat: <u>7</u> / <u>18</u> / 2011
Proposed Business Meeting Date: <u>08</u> / <u>10</u> / 2011	<input type="checkbox"/> Consent	<input checked="" type="checkbox"/> Discussion
Business Meeting Participant: <u>Shahid Chaudhry</u>	Time Needed: <u>5 minutes</u>	

Agenda Notice Statement: (This is the description that will appear on the agenda)

Possible approval of a \$2,056,229 Energy Conservation Assistance Act (ECAA) loan to the California Dept. of Corrections & Rehabilitation for lighting systems upgrading at Corcoran health facility. On completion, the project will reduce facility's annual energy use by 3.63 million kWh and greenhouse gas (GHG) emissions by 1,249.27 tons of CO2 equivalent. The loan will be awarded at an interest rate of 3%. The simple payback period is 6.22 years based on the loan amount. (ECAA funded)

Please list all known Subcontractors paid with proceeds connected to the project mentioned above:
The cell will expand as space is needed...

Project Manager	Date	Office Manager	Date	Deputy Director	Date
Executive Director	Date	Presiding Policy Committee	Date	Associate Policy Committee	Date

EXHIBIT A

ATTACHMENT 1

BUDGET DETAIL/PROJECT COST AND SAVINGS

This loan is made to the California Department of Corrections and Rehabilitation (CDCR) ("Borrower") for an energy savings Project. The Project consists of replacing 14,999 inefficient lighting fixtures to be installed at the Corcoran facilities located in Kings County, CA.

The Table below summarizes the estimated Project cost(s), saving(s) and simple payback(s) for the Project.

TABLE 1: Summary of Project Cost and Savings:

Energy Efficiency Projects	Estimated Total Project Cost	Energy Commission Loan	Estimated Annual Energy Cost Savings	Simple Payback* (Years)
364 PSMH Exterior High Intensity Discharge (HID) Lights (750 W each)	\$72,800		\$40,906	
242 Exterior HID Lights (150 W Induction each)	\$175,450		\$29,414	
1,014 Interior HID Lights (100 W Induction)	\$699,660		\$43,408	
920 Interior HID Lights (100 W Induction)	\$634,800		\$90,628	
432 Interior Fluorescent (2 Lamp 28WT8U6 RLO Ballast each)	\$36,037		\$4,390	
7,526 Interior Fluorescent (2 Lamp 28WT8 RLO Ballast each)	\$536,303		\$53,818	
3,390 Interior Fluorescent (3 Lamp 28WT8 RLO Ballast each)	\$411,716		\$48,948	
954 Interior Fluorescent (4 Lamp 28WT8 RLO Ballast each)	\$131,919		\$14,696	

129 Interior Fluorescent (8 Lamp 28WT8 RLO Ballast each)	\$26,522		\$4,214	
28 Interior Fluorescent (2 Lamp F96T12)	\$2,520		\$145	
Total Equipment and Construction Cost	\$2,727,277		\$330,568	
Agency Retention Cost (+)	\$200,000			
Total Project Cost	\$2,927,727			
Utility Incentives (-)	\$871,498			
GRAND TOTAL ALL MEASURES	\$2,056,229	\$2,056,229	\$330,568	6.22

* The simple payback is based on the loan amount.

The Borrower shall implement the Project in Table 1. Failure to implement all portions of the Project may reduce the approved loan amount. If necessary, the reduced loan amount will be determined by multiplying the annual energy cost savings by 11 [*i.e.* Maximum Simple Payback Period] or the total project cost, whichever is less. If the Borrower has received disbursements that exceed the amount of the reduced loan, the Borrower shall refund the difference to the Energy Commission.

**California Department of Corrections & Rehabilitation
(Corcoran Facility Loan)**

Loan No: -----

Pros:

- Consistent with the Energy Commission's *2009 Integrated Energy Policy Report* to reduce energy use, demand, and greenhouse gas emissions through efficiency and renewable energy programs and diversify California's energy sources.
- Meets the objective of the Energy Conservation Assistance Act (Public Resources Code Section 25412 et. seq.) which is to provide loans to public agencies to maximize energy use savings and implementation of cost effective energy efficiency measures.
- Consistent with the office's work plan goals of providing loans to public agencies for cost-effective energy saving projects.

Cons:

- None

Memorandum

To: Robert P. Oglesby
Executive Director

Date: July 15, 2011

Telephone: (916) 654-4558

From: **California Energy Commission**
1516 Ninth Street
Sacramento CA 95814-5512

Subject: STAFF RECOMMENDATION TO APPROVE A \$2,056,229 LOW INTEREST-RATE LOAN WITH THE ENERGY CONSERVATION ASSISTANCE ACT (ECAA) FUNDS TO THE CALIFORNIA DEPARTMENT OF CORRECTIONS & REHABILITATION FOR INSTALLATION OF ENERGY EFFICIENT LIGHTINGS AT THE CORCORAN FACILITIES TO BE CONSIDERED AT THE AUGUST 10, 2011 BUSINESS MEETING

Summary of Item

The California Department of Corrections and Rehabilitation (CDCR) is requesting a \$2,056,229 Energy Commission loan to fund energy efficiency project at its Corcoran facilities located in Kings County. The project includes replacing 14,999 inefficient lighting fixtures to reduce the facilities billing demand by 706 KW and annual energy use by 3,633 MWh/year; resulting in annual energy cost savings of \$330,568. The details of the lighting fixtures along with cost-benefits analyses are provided in Table 1.

The total project cost is estimated to be \$2,927,727 of which the Energy Commission loan will fund \$2,056,229. The project qualifies for utility incentives which in total are anticipated to be \$871,498. The Energy Commission loan will be funded at an interest rate of three percent.

Justification for Action Requested:

Energy Commission staff has determined that the loan request is technically justified and meets the requirements for a loan under ECAA. The program requires repayment of the loan, both interest and principal, within 15 years; this is equivalent to projects having a simple payback of 11 years or less. As this loan has a simple payback of 6.22 years, it meets the requirement of the loan program. In addition to reducing facilities energy use by 3,633 MWh/yr, this project will reduce annual greenhouse gas emissions (GHG) by 1,249.27 tons of CO₂ equivalent.

Table 1 - Summary of Project Cost and Estimated Savings

Quantity	Existing Fixtures	Proposed Fixtures	Project Cost (\$)	Savings			Simple Payback (yrs)
				KW	kWh/yr	\$/yr	
Exterior High Intensity Discharge (HID) Lights							
364	1000 W High Pressure Sodium (HPS)	750 W PSMH	\$ 72,800	102.65	449,599	40,906	1.78
242	400 W HPS	150 W Induction	\$175,450	73.81	323,289	29,414	5.96
Interior HID Lights							
1,014	175 MH	100 W Induction	\$699,660	105.46	477,094	43,408	16.12
920	150 MH	100 W Induction	\$634,800	163.76	994,083	90,628	7.00
Interior Fluorescent							
432	2 Lamp FB32T8	2 Lamp 28WT8U6 RLO Ballast	\$36,037	7.34	48,252	4,390	8.21
7,526	2 Lamp F32T8	2 Lamp 28WT8 RLO Ballast	\$536,303	127.94	591,511	53,818	9.97
3,390	3 Lamp F32T8	3 Lamp 28WT8 RLO Ballast	\$411,716	88.14	537,988	48,948	8.41
954	4 Lamp F32T8	4 Lamp 28WT8 RLO Ballast	\$131,919	26.71	161,520	14,696	8.98
129	8 Lamp F32T8	8 Lamp 28WT8 RLO Ballast	\$26,522	8.77	46,314	4,214	6.29
28	2 Lamp F96T12	4 Lamp 28WT8 RLO Ballast	\$2,520	1.09	1,596	145	17.35
Total Equipment and Construction Cost			\$2,727,727	706	3,633,246	\$330,568	8.25
Agency Retention Cost (+)			\$200,000				
Total Project Cost			\$2,927,727				
Utility Incentives (-)			\$871,498				
Total Loan Amount			2,056,229	706	3,633,246	\$330,568	6.22

Robert P. Oglesby
July 15, 2011
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Project Manager

Shahid Chaudhry, Special Projects Office

Oral Presentation

Staff will be prepared to discuss this recommendation and to respond to questions regarding the loan.

Business Meeting Participants

Pat Perez, Deputy Director, Fuels and Transportation Division
Shahid Chaudhry, Special Projects Office, Fuels and Transportation Division

Commission Action Requested

Approve the loan and authorize the Executive Director to execute the loan documents.

A handwritten signature in dark ink, appearing to read "Pat Perez", is written over a horizontal line.

PAT PEREZ, Deputy Director
Fuels and Transportation Division

**California Department of Corrections & Rehabilitation
(Corcoran Facility Loan)**

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- Meets the objective of the Energy Conservation Assistance Act (Public Resources Code Section 25412 et. seq.) which is to provide loans to public agencies to maximize energy use savings and implementation of cost effective energy efficiency measures.
- Consistent with the office's work plan goals of providing loans to public agencies for cost-effective energy saving projects.

Cons:

- None